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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/768,595	01/30/2004	Yaling Fan	STL11288.00	7053

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Fellers Snider Blankenship Bailey & Tippens
Bank One Tower
100 North Broadway
Suite 1700
Oklahoma CIty, OK 73102-0621

EXAMINER	
MERCEDES, DISMERY E	
ART UNIT	**PAPER NUMBER**
2627	
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05/16/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/768,595	FAN ET AL.	
	Examiner	Art Unit	
	Dismery E. Mercedes	2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *28-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *28,29,31,33,34,36-38 and 40-51* is/are rejected.

7)☒ Claim(s) *30,32,35 and 39* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 August 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 28,38,44,48 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

2. Claim35 objected to because of the following informalities: claim 35 is dependent on itself. Appropriate correction is required. For examination purposes examiner assumed claim 35 is dependent on claim 28.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims *28-29,31,33,34,36-38 and 40-51* are rejected under 35 U.S.C. 103(a) as being unpatentable over Ou-Yang et al. (US 6,728,062) in view of Balster et al. (US 5,818,658).

As to Claim 28, Ou-Yang et al. discloses a cantilevered assembly with an upstream leading edge and a downstream trailing edge (col.4, lines 32-34); Ou-Yang et al. discloses such wherein the airflow is being provided to the desired direction, leading or trailing area of the assembly (abstract and col.4, line 55 – col.5, line 64). Ou-Yang et al. fails to specifically disclose wherein the flow control device is a blower assembly providing pressure. However, Balster et al. discloses a head

gimbal assembly comprising a blower assembly that provides pressure (see col.2, line 51-col.3, line 15). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus as disclosed by Ou-Yang et al. by implementing a blower assembly as disclosed by Balster et al., the motivation being to allow the head to fly at any height without introducing undesirable slider angle thus reducing the chances of head crash (see col.1, lines 55-58).

As to Claim 29, Balster et al. further discloses a nozzle coupleable to the blower assembly to supply pressure (see fig.1 and col.2, line 51-col.3, line 15).

As to Claim 31, Balster et al. further discloses a flow sensor coupled to a controller to regulate the blowing pressure (col. 3, lines 1-25, a vacuum sensor).

As to Claim 33, the combination of Ou-Yang et al. and Balster, further discloses a shroud proximate to a downstream region of the cantilevered assembly (as disclosed by Ou-Yang, figs.6-8, 327 and col.5, lines 24-45 wherein the airflow towards the downstream portion of the shroud is controlled), wherein the flow control device further comprises a blower nozzle coupled to the blower assembly to provide the blowing pressure through at least one passage in the shroud (as disclosed by Balster fig.3 and respective description thereof, and col.5, lines 24-43). Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the apparatus as disclosed by Ou-Yang et al. by implementing a blower assembly to provide pressure a passage in the shroud, as disclosed by Balster et al., the motivation being allow the head to fly at any height without introducing undesirable slider angle, thus reducing the chances of head crash (see col.1, lines 55-58).

As to Claim 34, the combination of Balster and Ou-Yang further discloses a vacuum assembly to provide suction pressure (Balster et al., col. 2, line 51-col.3, line 15) to the upstream leading edge (Ou-Yang et al, wherein Ou-Yang discloses airflow path in either the upstream or trailing edge).

As to claim 36, Ou-Yang et al. further discloses wherein the transducer configured to write data to a storage medium (see figs.1,3 and col.1, line 43 to col. 2, line 5 and col.2, lines 52-63.).

As to Claim 37, Ou-Yang further discloses a multi-disc servo writer to write servo data a plurality of rotable discs (see fig.9 and see col.3, lines 1-20).

As to Claim 38,40-43 have limitations similar to those treated in the rejection of claims 28,31,34,36, and are met by the references as discussed above.

As to Claim 44, has limitations similar to those treated in the rejection of claim 28, and are met by the references as discussed above. Claim 44, however also recites: establishing a fluidic path from an upstream edge to a downstream trailing edge, which is disclosed by Ou-Yang et al. (col.4, line 40- col.5, line 40-wherein the airflow is formed from a leading edge to the trailing edge).

As to Claim 45, Ou-Yang et al. further discloses wherein the fluidic flow is generated by rotation of a disc adjacent the cantilevered assembly (see col.5, lines 55-60 and col.6, lines 3-5 wherein the airflow is developed from the rotation of the discs).

Claims 46-47 have limitations similar to those treated in the rejection of claims 34 and 37 and are met by the references as discussed above.

As to Claim 48, has limitations similar to those treated in the rejections of claims 28 and 34 and are met by the references as discussed above.

As to Claims 49-51 have limitations similar to those treated in the rejection of claims 45-46 and 28 and are met by the references as discussed above.

Allowable Subject Matter

3. Claims 30,32,35,39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Schirle (US 5,898,545); Chang et al. (US 2002/0075591); Shimizu et al. (US 6,369,978);Srikrishna et al. (US 6,147,834); Toffle et al. (US 6,445,540) ;Dahlenburg et al. (US 2002/0181148);Tadepalli et al. (US 2004/0184180).

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dismery E. Mercedes whose telephone number is 571-272-7558. The examiner can normally be reached on Monday - Friday, from 9:00am - 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrea Wellington can be reached on 571-272-4483. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DM

ANDREA WELLINGTON
SUPERVISORY PATENT EXAMINER